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Title of the invention

A DECANTER CENTRIFUGE WITH A SCREW CONVEYOR HAVING A
VARYING PITCH

5 Field of the invention

The present invention relates to a decanter
centrifuge for separation of a supplied material in a
light phase and a heavy phase, comprising an elongate
bowl arranged for rotation about its longitudinal
10 axis, said bowl having a separation chamber, a screw
conveyor being provided in the separation chamber and
being coaxial with the bowl, said screw conveyor com-
prising a body, which carries a screw comprising one
or more flights and having a nominal transport speed
15 varying along the longitudinal axis, an inlet with at
least one inlet opening in the screw conveyor for
supply of the material to the separated, and at least
one discharge opening for the heavy phase in the bowl
at one end of the screw conveyor, in which the screw
20 conveyor is made to rotate relative to the bowl in
view of conveying the heavy phase towards the dis-
charge openings for the heavy phase, and in which the
screw conveyor is provided with a baffle positioned
between the inlet openings and the discharge open-
25 ings, said baffle dividing the separation chamber in
a substantially cylindrical separation part and an at
least partially conical discharge part, the discharge
openings for the heavy phase being positioned in the
discharge part, the inlet openings being positioned
30 at the opposite side of the baffle relative to said
discharge openings.